



Aura Series
(PP-7000II / PP-7200L / PP-7000U /
PP-7200U) THERMAL PRINTER
USER'S MANUAL



FCC Notes:

Rev.: D1

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

CE manufacturer's Declaration of Conformity
(EC Council Directive 89/336/EEC of 3 May 1989)

This product has been designed and manufactured in accordance with the International Standards EN50081-1/01.92 and EN50082-1/01.92 following the provisions of the Electro Magnetic Compatibility Directive of the European Communities as of May 1989

Warranty Limits:

Warranty terminates automatically when any person other than the authorized technicians opens the machine. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

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GETTING STARTED

CONGRATULATION

You have made a very wise decision by purchasing the easy loading; low noise; high resolution; light weight; high reliability thermal printer Aura (PP-7000II, PP-7200L, PP-7000U & PP-7200U) series of Posiflex products. This series of printers has been elegantly designed for a Point-Of-Sale, kitchen & kiosk application. The PP-7000U complies with UPOS (Unified POS) 1.8 standards and the rest models comply with UPOS 1.7 standards under Posiflex UPOS driver support. The manufacturer of this printer not only wishes to take this opportunity to congratulate your smart investment on buying this printer but also likes to express the wishes for your prosperous future by using it.

PRODUCT BRIEFING

The Aura PP-7000II, PP-7200L, PP-7000U & PP-7200U series printer uses thermal sensitive paper in form of a roll at a width of 80 mm (standard) or 58 mm (option). These Aura series printers serve the stand-alone desktop application as well as the application within a Posiflex integrated POS system equally perfect.

The Aura PP-7000II series support two types of interface input through different sub-codes to the model number. The interfaces are RS232 for serial interface and Centronics for parallel interface. The Aura PP-7200L series connects to a LAN port of Posiflex POS systems. The Aura PP-7000U series connects to an USB port of Posiflex POS systems and simulates a RS232 device through driver and performs thermal printing particularly designed for POS applications. The Aura PP-7000U series is already **WEPOS** (Windows Embedded for Point Of Service) certified. The Aura PP-7200U series is a similar model to PP-7000U redesigned particularly for high performance in graphic application under Windows environment by removing the internal serial communication limitations. Aura printer of different model number sub-codes utilizes different cabinet color and accessory cable and switch setting to accommodate the requirement of different interface.

The Aura PP-7000II, PP-7200L, PP-7000U & PP-7200U support a guillotine type auto cutter for paper partial cut and a manual cut mechanism. The Aura series also supports user's company's LOGO downloading for superior performance. It even supports some enhancement capability for reminder function to persons around. It can be used to drive a separately purchased **kitchen bell** for such reminder function in noisy environment. This printer also supports application in different countries of various kinds of power systems by changing the power cord to the power adaptor. It offers outstandingly high printing speed. This series make beeping sound as response to Paper End or Paper Near End signals.

UNPACKING

Followings are items you may find when you carefully unpack the carton that delivers Aura series printer. If there is any discrepancy or problem, contact your dealer immediately. **Be sure to save the packing materials in case the printer needs to be shipped at some point in the future.**

- 1). The printer itself
- 2). Thermal paper test roll 80 mm wide
- 3). One piece of spacer plate
- 4). One of the interface cables:
 - a.. Serial cable with 9 pin D sub Female to 9 pin D sub Male connectors for Aura PP-7000II serial model
 - b.. Parallel cable with 25 pin D sub Male to 25 pin D sub Female connectors for Aura PP-7000II parallel model
 - c.. No interface cable for PP-7200L
 - d.. USB cable for Aura PP-7000U / PP-7200U
 - e.. Option powered USB cable (P/N: 21863256800) for Aura PP-7000U / PP-7200U

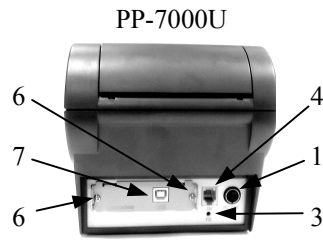
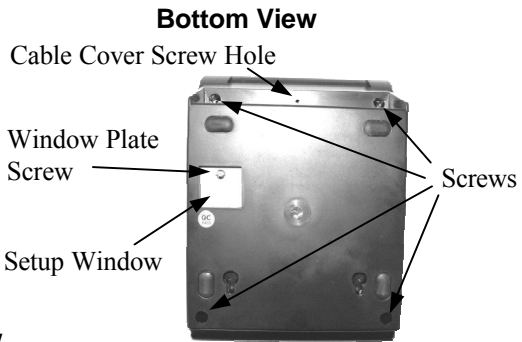
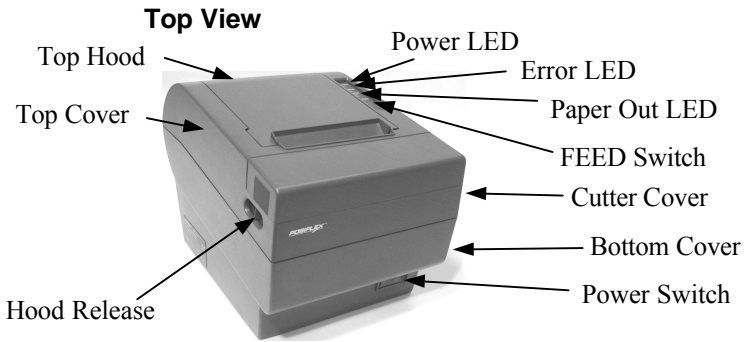
Length of the interface cable depends on whether the order includes the power adaptor. When power adaptor is included, the interface cable is 6 ft long for stand alone application. When the power adaptor is not included in the order, the interface cable is a shorter one for integrated application in Posiflex POS system.

- 5). One of the power sources:
 - a.. Power adaptor + power cord (depend on country type ordered)
 - b.. Power supply cable (when no power adaptor and no powered USB cable ordered)
- 6). This User's Manual
- 7). One cable cover

OPTIONS

- 58 mm paper guide adaptor (can be modified at distributor's site only)
- Kitchen bell
- Wall mount kit
- Model select: Standard, European, Arabian, Baltic, Bulgarian, Greek, Thai and Latin II model
- Language to add to standard model: Japanese Kanji, Korean, Simplified Chinese or Traditional Chinese

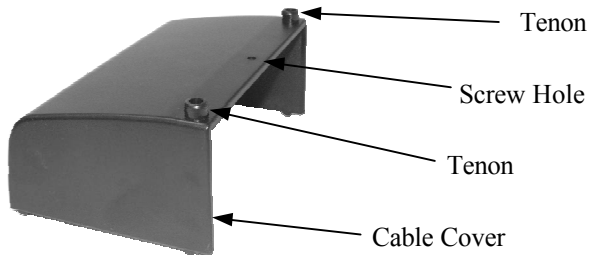
PRODUCT PICTURES



The numbered items above are:

- 1). Power Connector
- 2). Parallel Connector
- 3). Frame Ground
- 4). Peripheral Connector
- 5). Serial Connector
- 6). Interface Bracket Screw
- 7). USB Connector
- 8). LAN Connector
- 9). Reset Pin Hole
- 10). Service Serial Port

Cable Cover



INDICATORS

- Power LED: green
- Error LED: red
- Paper Out LED: red

QUICK START-UP

LOADING PAPER

Desk Top Application

1. Slide the hood lock toward the front of the printer to release the hood as in **Pix. 1**.



Pix. 2

2. Raise the released hood wide open manually as in **Pix. 2**.
3. Drop the thermal paper roll inside the printer in orientation as shown in **Pix. 2**.
4. Close the hood back leaving the tail of the paper roll coming out of the opening between the hood and the top cover as in **Pix. 3**. Tear off excessive paper.



Release Button
Pix. 1



Pix. 3

When to Replace Paper

Whenever the printer gives paper out signal or a red line appears on the thermal paper, it is the proper timing for replacing the paper. Do not wait till the print engine is dragging the paper roll at the very end. Remove the leftover and replace a new paper roll as illustrated above to prevent excessive paper dust in the printer and consequently possibility for paper jam.

CONNECTING CABLES

Connection Area Pictures



PP-7000II



PP-7000U



PP-7200L



PP-7200U

Serial Connection

All the external connectors are in the recessed area at the rear bottom for PP-7000II. The serial connector is a 9-PIN D sub Female connector at the

right in the picture above. Apply the male connector of RS232 cable to this port for serial application. Please note that when serial connection is used, there must be no cable connection at the parallel port on the printer. The default protocol used in serial connection is 19200 bps, none parity, 8 data bits, 1 stop bit. Set in setup window the **switch positions both 1, and 2 to OFF leaving the rest unchanged as factory default setting**

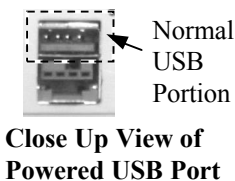
Parallel Connection

The parallel connector is a 25-PIN D sub Male connector at the leftmost location in the connector area for PP-7000II. Apply the female end of the parallel cable at this port for parallel application. Please note that when parallel connection is used, there must be no cable connection at the serial port on the printer. Please also note that to keep parallel interface in fast operation, please adjust in setup window the **switch positions both 1, and 2 to ON leaving the rest unchanged as factory default setting.**

LAN Connection

The LAN connector is a 8-PIN RJ45 connector in middle left of the connector area for PP-7200L. Please use a LAN cable of CAT 5 with proper length to connect the LAN connector on the printer to the LAN HUB as appropriate. Please also note that to keep LAN interface operative, please adjust in setup window the **switch positions both 1, and 2 to OFF leaving the rest unchanged as factory default setting. DO NOT CONNECT THE PERIPHERAL DEVICE TO THIS PORT!!** The LAN port is 10/100BaseT compliant.

USB Connection



The Aura PP-7000U/7200U series support two types of USB interface input namely a Normal USB interface and a + 24V Powered USB interface. The cable for normal USB connection has a type A normal USB connector at one end that is a more or less flat shape 4-PIN connector and a type B normal USB connector at the other end that is a more or less square shape connector as in picture above. The Powered USB Cable (P/N: 21863256800) has 3 plugs: a + 24V Powered USB plug at one end, a type B normal USB plug and a 3-PIN power plug at the other end.

Use the normal USB Cable (P/N: 21863250800) to connect to a normal USB port or the normal USB portion of the powered USB connector of host system. The power adaptor is required in this normal USB application. Use the powered USB cable to connect a +24V Powered USB port of Posiflex POS system with the powered USB plug, and connect to the USB port in PP-7000U/7200U with the type B normal USB plug and the 3-PIN power plug to the 3-PIN power jack in PP-7000U/PP-7200U. The power adaptor can be deleted in this powered USB application. Please always press the locking strap first before disconnecting the Powered USB cable. Please visit our web site <http://www.posiflex.com> or <http://www.posiflex.com.tw> for detailed information of the USB driver installation if required. Set in setup window the **same way as in serial connection, i.e. switch positions both 1, and 2 to OFF leaving the rest unchanged as factory default setting.**

Peripheral Connection

The peripheral controller is a 6 pin RJ11 type modular jack. With use of Posiflex cash drawer cable 21863018010 (CCBLA-180-1) come with cash drawer, this port can control a Posiflex cash drawer CR3100 or CR3200 or CR4000 or CR4100 or CR-6310. If a Posiflex special split cable 21863023800 (CCBLA-238) is used instead, this port can control two cash drawers of above models.

When the printer is used as a kitchen printer, please use this port for kitchen bell connection instead.

Power Connection

The power connector is a 3-PIN jack between the peripheral connector and the parallel connector for PP-7000II or between the peripheral connector and the B type USB connector for PP-7200U and is at the rightmost for PP-7000U & PP-7200L. Either a Posiflex supplied power adaptor or a printer power cable from a Posiflex POS system can be connected to this connector to supply power for this printer. During insertion of the power plug, be sure to hear the click to obtain a firm contact.

CAUTION: Before doing the insertion or extraction of the power plug, be sure to pull the outer sleeve of the plug backward to release the internal latch. Failure to do this could damage the power plug. Such damage is considered as an artificial destruction and is not covered by the warranty.

Install Cable Cover

Check the bottom view of the printer, the 4 screws for the printer itself are in quite deep holes. Insert the tenons of the cable cover into the 2 printer screw holes nearest to the connection area. Apply a cable cover fixing screw at the matched screw holes as circled in the bottom view picture at right.



Power On

When all the above cable connections are made correctly, you may connect your power adaptor to the wall outlet. Make sure that the type of power cord and the voltage requirement of the power adaptor meet the local power conditions. Now the printer is ready for power on.

Self Test

Press and hold down the feed button while turning the on / off switch on. The printer will then perform a self-test. A sample slip of self-test result is printed as in the sample at right. Please note that both serial and parallel interfaces are indicated. That means the printer is working on an auto-sensing and auto-select algorithm.

The header is printed in text mode and the rest part of this slip is printed in page mode. If FEED button is pressed at this moment, a font table will be printed in text mode again. To exit the test printing, please turn the printer off and on again.

```
PP-7000II THERMAL PRINTER SELFTEST
FIRMWARE VERSION 7.5 STD
```

```
INTERFACE : SERIAL / PARALLEL
BAUD RATE : 19200 bps
NONE PARITY, 8 BIT, 1 STOP BIT
HANDSHAKING : HARDWARE
PRINT WIDTH : 512 dot/line
```

```
PAPER WIDTH = 80 mm
PRINTING SPEED = 180 mm/s
BOOT VERSION = V6.0
```

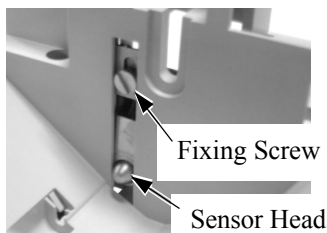
CHARACTER DUMP PROCESS

```
!"#$%&'()*+,-./0123456789:;<=>?@ABCD
EFGHIJKLMNOPQRSTUVWXYZ[\]^_`abcdefg
hijklmnopqrstuvwxyz{|}~`Çüëääåçèéëìí
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ìíîïðññòóôõö÷øùúûüýþÿ*!@#%&'()*
+,-./0123456789:;<=>?@ABCD EFGHIJK
LMNOPQRSTUVWXYZ[\]^_`abcdefgijklm
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ðññòóôõöøùúûüýþÿ*!@#%&'()*+,-./
0123456789:;<=>?@ABCD EFGHIJKLMN
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SPECIAL ADJUSTMENTS

Paper Near End Sensor

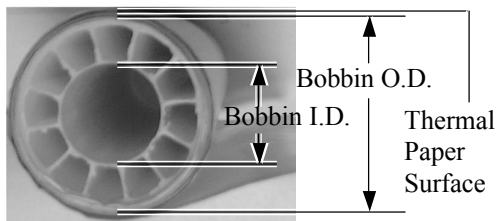
The near end sensor for paper roll in the printer is able to have the printer work with paper rolls of several bobbin sizes. Please refer to the picture at right from inside the paper roll compartment that there are a fixing screw and a sensor head in the wall. Slightly release the fixing screw to adjust the



position of sensor head. The acceptable paper roll bobbin outer diameter is between 18 and 22mm. This adjustment allows sensor activation on paper roll overall diameter between 21 and 23.6 mm unless for too light bobbins. Remember, for smaller roll diameter, the sensor head should go higher.

Paper Roll Replacement

When the paper roll to put (back) in is already nearly used up, the paper roll must be placed in the way that the paper roll touches the sensor head from the outer surface but never allow the sensor head to ride on the



bobbin body between the inner and outer diameter of the paper roll bobbin nor to go into the inner diameter of the paper roll bobbin. It is also noticed that some market available paper roll has extremely light bobbin, easily causing the paper roll to go off position when paper feeding with low remaining paper. In this case, the paper near end sensor may function abnormally and it would be a good solution to set in the setup window to have the printer to send busy only when input buffer is full and not based on every off line signal.

Spacer Plate

If the paper roll is of width less than the standard 80 / 58 mm, it may run away from the paper near end sensor during application resulting in an error status. In this case, please stick the spacer plate to the wall opposite to the paper near end sensor in the paper roll compartment. Each spacer plate compensates 1 mm paper roll width shortage. There will be 1 spacer plate in the accessory of the printer. If the user uses narrower paper roll and requires more spacer plates, it can be purchased from Posiflex.

Paper Cutting

The paper advance after a protective cut is set to 12 mm. In case the user uses direct cut instead of protective cut to have something like a logo printed on top of each slip, it is also highly suggested to print the logo and necessary paper feeding to make 12 mm paper advance right after each cut to prevent curling up and jamming of paper front edge inside the paper exit slot.

Wall Mount Application

In wall mount application, the paper near end sensor will not work properly and it is suggested to set in the setup window to have the printer to send busy only when input buffer is full and not based on every off line signal.

INSTALLING DRIVER

There will always be a Posiflex Product Information CD or a separate CD of similar nature but specifically created for the product delivered. Please find the appropriate subfolder from the non-specific Posiflex Product Information CD and check the information file like “readme” or installation guide or application guide and follow the instructions inside.

LAN PRINTER SPECIFIC ISSUES

Web Manager

The default static IP for the PP-7200L is 192.168.192.168 and default listen port is 9100. User may set his own IP to the same network segment and use any browser to connect to the printer IP to configure the LAN setup of the PP-7200L including changing the printer IP for application according to his network administrator’s request. However, DHCP is not supported.

Reset Pin Hole

As the LAN setup for the PP-7200L can be set freely, if the changes are not well registered some troubles could be introduced. Therefore, in PP-7200L, there is a “Reset pin hole” near the LAN connector. Use something like a ball pen tip or straightened end of paper clip to push and hold for at least 5 seconds into this hole will reset the LAN setup of the printer back to the default values at delivery so the user may re-do all setup. The LAN setup can be viewed in second paragraph of self-test printout for the PP-7200L.

LAN POS Printer Manager

This utility can be used to manage multiple PP-7200L’s connected in same network under Windows as long as there is no conflicting IP in the network. This utility can assign to each LAN printer a different device name for easy recognition. In case of confusion, please check the MAC addresses listed in this utility against the MAC address label you can find under each printer.

Printer Driver Setup

Any PC connected in same network can use TCP/IP to use PP-7200L in the way like a directly connected local printer. So, for direct I/O control by tools like “HyperTerminal” all commands applicable to the serial or parallel interface model can work on PP-7200L in the same way as PP-7000II except the port must be TCP/IP with the IP address of the printer. Similarly, for Windows printer driver setup, please “Add Printer” and select for “Local printer” and select port “TCP/IP” with the printer IP address then use the same Windows printer driver of PP-7000II for PP-7200L.

OPERATION GUIDE

MAINTENANCE GUIDE LINES

- Always turn off and disconnect power before opening the cover.
- The areas around the print head and motor become very hot during and just after printing, DO NOT touch them.
- When handling the interior of the thermal printer, please pay attention not to be hurt by any sharp edge of the metal parts.

GENERAL CLEANING

Please use soft hairbrush or compressed air to clear away any dust or paper scraps accumulation inside the printer. Check also the area of the auto-cutter regularly.

PRINT HEAD CLEANING

The print head is located underneath the roll paper passage at the exit as in the picture below. You can clean the thermal elements of the print head and paper sensor gently using a cotton swab moistened with isopropyl alcohol solvent.

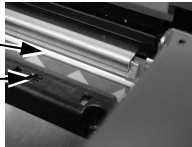
NOTE: Never do this when print head is still hot

Do not touch the print head thermal elements

Do not scratch the print head

Thermal Elements

Paper Sensor



Before putting back the paper roll for printing, alcohol solvent must be dried completely.

TROUBLE SHOOTING

This section gives solutions to some printer problems you may have.

General Problems

No LED lights up on control panel when switched on – Make sure that the power supply cables are correctly plugged into the printer, the power adaptor and to the power outlet. Make sure that power is supplied to the power outlet. If the outlet is controlled by a switch or timer, try use another outlet

Printing Problems

Nothing can be printed with ERROR LED flashing – Most

possible cause for the flashing Error LED is that the printer has been printing for quite a period of time and the print head temperature become too high. After few minutes under normal ventilation, the print head should be able to cool down and the Error LED will stop flashing. Printing will resume after cooled down. If this is not the case, contact a qualified service person.

Nothing can be printed with ERROR LED ON – Check the Paper Out LED. If it is ON, most probably either the paper roll is not installed or the paper roll is at or near the end. Install a new paper roll. If the Paper Out LED is OFF, please check if the print hood is properly closed. There are 2 internal check points inside the printer to assure the locking of the hood for a decent printing. Therefore any dislocation of the hood may cause an error status and inhibition to printing. **Press down the hood at middle of the opening** when closing it till it audibly clicks into place. If both situations are not the cause, please try pulling the hood lock forward. If the top hood won't release automatically, **check for paper jam** described in next item.

If there is no paper jam and the print head is not overheated, turn off the printer and wait for half a minute then turn it back on. If the problem still remains, contact a qualified service person.

Nothing can be printed with ERROR LED OFF – Try to run self-test according to previous chapter to check if the printer itself works properly. If the self-test passes, check the following:

- 1). Check the connection of the interface cable at both the printer and computer ends. Also make sure that this cable meets the specification required for both the printer and the computer.
- 2). Check the printer data communication settings against the computer. The printer settings can be found easily on the self-test print out.

If the problem remains or the self-test fails, contact your dealer or a qualified service person.

Poor printing quality – Contaminants like paper scraps and dusts on the thermal print head can lower the print quality drastically. Clean the print head as described in previous section.

Printer trembles when printing – Since PP-7000II series prints at 180 mm / sec that is extremely high speed, the printer may tremble due to frequent engagement of the brake and acceleration of the motor. Such situation in turn can be consequences of very complicated printer operation command or heavily dense printing (like in inverse printing) in print content or irregular / insufficient data flow received from the host. When this happens, the print speed will be dragged down drastically since the motor has to be stopped frequently. Avoiding such drawbacks can free the printer from trembling and degraded performance. As a common practice, increasing the communication

baud rate could be a smart decision to this situation. (No need to change baud rate if no trembling occurs to eliminate possible data error rate.)

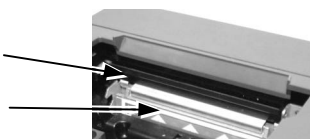
Paper Jam Problems

Paper is jammed inside the printer – Turn off the printer and open the print hood by releasing the hood lock. Remove the jammed paper and reinstall the paper roll. Close the hood properly and firmly. Then turn on the printer for operation.

If the auto cutter is jammed, the print hood will be locked. Please first resolve the auto cutter problems per description in next item and then come back to deal with the paper jam. **Never force open the print hood.** Please also clear away any contaminants accumulated in the cutter track above the thermal elements.

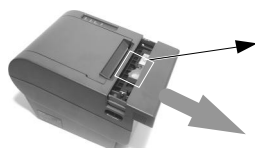
Auto Cutter Track

Thermal Elements

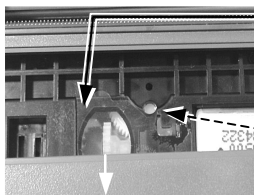


Auto Cutter Problems

In case any foreign materials like a staple or paper clip or excessive paper scraps fall into the auto cutter mechanism the auto cutter may lock up and so does the print hood. In such case, please pull the cutter cover forward to expose the cutter mechanism. Apply some mechanical assistance in below procedures to help resetting the cutter blade back to its home position. Please lift up if exist a transparent protective cover over the adjustment wheel with the printer powered off. Turn this wheel downward for 4 or 5 strokes. Aim the guide of the cutter cover and push it back to position to close the cutter cover and turn the printer power on to see if the auto cutter lock up problem is resolved.



Open Cutter Cover
when hood locked



Lift transparent
protective foil

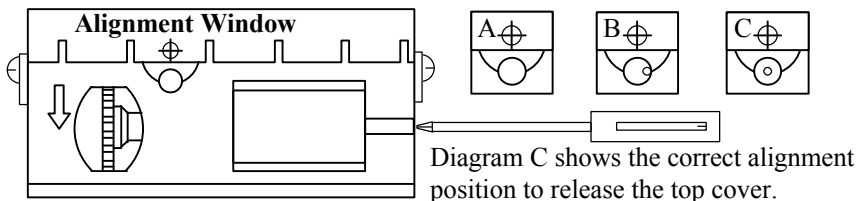
Alignment window

Turn the wheel downward for few strokes.

If the problem is not automatically resolved by above procedures, please power off the printer and open the cutter cover again. Check in the alignment window while turning the gear downward as above or with a small

Phillips screwdriver at the right side of the print mechanism. When the cutter blade returns to its standard position, a hole in the plastic gear will show up in the window as illustrated in diagram C below. Close the cutter cover when finish. The lock up of the print hood can then be released after this problem solved.

Please use manual cutter as temporary alternative measure once the auto cutter malfunctioned.



Advanced Analysis Tool

This printer supports **Hexadecimal Dump** for experienced user to view exactly what data is received by the printer. This can be useful in finding software problems.

To start the dump mode: Turn off printer; Open print hood; Hold down FEED button while turning printer on; Close the hood.

To stop the dump mode: Press the FEED button to print out the last line; Turn off the printer.

During dump mode: All commands except **DLE EOT** and **DLE ENQ** are disabled.

USEFUL TIPS

- Please note that only those qualified technicians may adjust several jumpers for some technical settings. Please visit our web site <http://www.posiflex.com> or <http://www.posiflex.com.tw> for details of the technical information such as driver installation, DIP switch settings and command sets etc. if required.
- Place the printer on a sturdy, level surface.
- Choose a place that is well ventilated and free of excessive dust, smoke or fume.
- Do not put the printer under direct sunlight or near a heater.
- Ideal room temperature is from 5°C to 40°C. Ideal humidity is from 20% to 85% RH (no condensation).

- Do not set any liquid or drinks such as coffee on the printer case.
- Do not touch any metal part to avoid possible electrostatic damage.
- Do not touch the areas around the print head and motor during or right after printing. It can be very hot.
- Do not allow the cut receipt to slide back into the cutter during the operation. As this would lead to multiple cutting at the lower edge of a receipt and the multiple cut thin slips tend to cause mechanical malfunction.
- Use a grounded AC power outlet with only the power cord and power adaptor furnished with the printer.
- Do not use a power outlet of a circuit shared with any equipment that uses a lot of power or causes great electrical noises, such as a copier, electric motors or a coffee maker.
- Do not use thermal paper containing Sodium (Na⁺), Potassium (K⁺) and Chlorine (Cl⁻) ions that can harm the print head thermal elements.
- If the surface of thermal paper is scratched with a hard object such as a nail, the paper may become discolored.
- If thermal paper touches diazzo copy paper immediately after copying, the printed surface may be discolored.
- Use only water paste, starch paste, polyvinyl paste or CMC paste when gluing thermal paper.
- If thermal paper touches anything containing phthalic acid ester plasticizer for a long time, the image formation ability may be reduced or the printed image may fade.
- Use of volatile organic solvents such as alcohol, ester and ketone or some adhesive tapes on thermal paper can cause discoloration.
- Thermal paper must not be stored with the printed surfaces against each other as the printing may be transferred between the surfaces.
- Since the paper roll is highly thermal sensitive, please keep them in a dark place that is 20° and 65% RH when not installed in the printer. Avoid extended exposure to direct light. Use only products made from polyethylene, polypropylene or polyester for storage of thermal paper.

SPECIFICATIONS

PRINTER

ITEM	SPECIFICATION
Printing method	Thermal sensitive line dot method
Effective printing width	64 mm
Thermal head configuration	512 dots / line
Printing speed	180 mm /sec.
Paper feed method	Friction auto-feed
Paper load method	Drop and use
Auto-cutter capability	Partial cut (1 point at center left)
Manual cutter	Saw tooth blade
Dot Pitch	0.125 x 0.125 mm
Input power type	DC
Input voltage	24 V + / - 5 %
Dimension (mm)	148 (W) x 199 (D) x 144 (H)
Weight	1.35 Kg net

PAPER

PAPER TYPE	THERMAL ROLL PAPER
Paper roll formation	External side is heat-sensitive side
Paper width	80 (or 58) + 0 / - 1 mm
Paper roll outer diameter	83 mm max.
Paper roll inner diameter	12 + 1 / - 0 mm
Paper thickness	60 ~ 80 um

POWER ADAPTOR

ITEM	REQUIREMENT
Input voltage	100 V AC ~ 240 V AC
Input frequency	50 ~ 60 HZ
Input current	1.8 A MAX. @ 115 V AC
Output voltage	+ 24 V DC
Output power	60 W
Static load	0 A ~ 2.5 A
Output regulation	+ / - 5 %
MTBF	30,000 HRS
EMI standards	VDE – A, FCC – A, VCCI – A

SERVICE WINDOW SETUP

PRINTER

On bottom cover of the Aura series thermal printer, there is screwed a metal plate for setup window. In this window, there is a 8 position DIP switch for printer setup. Please use proper tool to change the switch setting when necessary. The switch position counting starts from the nearest edge of printer. The ON direction points to the connector area of the printer. The OFF direction points to the power switch. The functions of each position may evolve with the revisions of the firmware. The information below applies to the latest version to the date of print of this manual.

This 8 position DIP switch works as following:

Switch position	ON	OFF
1	RS232 baud rate definition or Parallel interface definition (ref. separate table below)	
2		
3	Even parity	None parity
4	XON handshaking	Hardware handshaking
5	Busy on "buffer full"	Busy on "off line"
6	Immediate cut	Protective cut
7	CR code effective	CR code ineffective
8	Factory internal setting	Application standard mode

Effect of positions 1 & 2 on baud rate is defined as in table below with parity check set according to position 3, number of data bits always set to 8, and stop bit set to 1. When the interface used is anything other than RS232, please set these 2 switches only at exactly the specified combination.

SW Pos. 1	ON	OFF	ON	OFF
SW Pos. 2	ON	ON	OFF	OFF
Baud rate or Interface	38400 bps (Parallel)	4800 bps	9600 bps	19200 bps (RS232/LAN/USB)

Switch position 3 defines the parity check regulation in serial interface. In Aura, it is selectable between even and none.

Switch position 4 defines the handshaking method in serial interface. When it is set to ON, the printer transmits an "XOFF" for busy and sends an "XON" for not busy. When it is set to OFF, the printer signifies the busy status over hardware signals that can be detected by the host as "DSR" or "CTS". When parallel interface is used, both switch positions 3 and 4 should be set to OFF.

For switch position 5, if the switch is set to ON, the busy signal is sent to host only when input buffer is full. When it is set to OFF, busy signal is sent

to host whenever an off line status occurs. Therefore, signals including the paper near end detect will generate busy signal to the host. Consequently, the printing may be stopped even when there is still a long way to go before the paper roll is actually exhausted. Taking the paper out beep into consideration, the printer will keep on beeping at Paper End (completely no paper) till paper is replaced when S1-5 is ON. Yet when S1-5 is OFF, the printer will keep on beeping every 3 seconds at Paper Near End (still long paper in replace) till paper is replaced.

For switch position 6, when it is set to OFF, there will be a 20 mm paper feed before cutting when software does not define this point and there will be further 10 mm paper after cutting to prevent paper jam. Before setting this switch to ON, please make sure that your software will take care of enough paper feed for the paper jam prevention issue.

For switch position 8, when it is set to ON in the field, the printer maybe subject to unpredictable damages and must be strictly prevented.

The factory default for each position is listed below:

Switch Position	1	2	3	4	5	6	7	8
Serial interface w/ auto cutter	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Parallel interface w/ auto cutter	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
USB interface w/ auto cutter	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LAN interface w/ auto cutter	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

INTERNAL SWITCH

There is an extra internal 4 position DIP switch in PP-7000II series for more technical settings. To access these setup, please first turn off the printer power and disconnect every cable from the printer. Remove 4 screws from bottom of printer and remove the plastic bottom cover with the power switch pressed. The 4 position DIP switch seats beside the 8 position DIP switch for setup window with the switch position counting starts from the nearest side to the 8 position DIP switch.

This 4 position DIP switch works as following:

↓	Switch position	Setting Effect	
	Function	ON	OFF
1	Factory internal setting	Disable	Default
2	Paper width	58 mm	80 mm
3	Line format	576 dots / line	512 dots / line
4	Reserved	N. A.	N. A.

The Switch position 1 default set to ON. The print speed is fixed at 42.5 lines/sec.

Switch position 2 is usually set to OFF for use with 80 mm paper width. When the printer is installed with the 58 mm paper guide adaptor for use with the paper roll of 58 mm width, the switch should be set to ON.

Switch position 3 is usually set to OFF for ESC/POS command application that prints at 512 dots / line. Only technical users shall set this switch to ON and make the printer work in the 576 dots / line format.

SERVICE SERIAL PORT

There is an extra 9 pin female D sub connector for PP-7200U model in connection area. This port is designed for technical service only. **DO NOT** connect it for other purpose!

